Date: Fri, 1 Apr 94 04:30:10 PST

From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>

Errors-To: Ham-Ant-Errors@UCSD.Edu

Reply-To: Ham-Ant@UCSD.Edu

Precedence: Bulk

Subject: Ham-Ant Digest V94 #87

To: Ham-Ant

Ham-Ant Digest Fri, 1 Apr 94 Volume 94 : Issue 87

Today's Topics:

AEA Hotrod trouble

AEA Hot Rot whip for HT

CB Mag mount for 10M mobile? (3 msgs)

Circular Polarization in Mobile Communication

Cushcraft R7 Vertical (2 msgs)

super antenna, ?

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu> Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 31 Mar 94 15:09:51 GMT From: news-mail-gateway@ucsd.edu

Subject: AEA Hotrod trouble

To: ham-ant@ucsd.edu

Jerry Writes:

>I recently purchased an AEA HotRod 1/2 wave whip antenna from Kevin Jensen >N1KCG from rec.radio.swap. He used it in his htx202 and said it was >working.

>However, when I got the antenna and connected it to my antenna, I did not >get better coverage with the hotrod compared to the htx202 rubber duck

>In fact it was worse, what I can reach with the rubber duck antenna, >the hotrod antenna cannot.

>

stuff deleted...
>
>jerry
>N3RKD

The 1987 "Hints and Kinks" compendium had an interesting short piece about the relative performance of the "Hot Rod". The author had a kenwood HT and did some comparison tests among the "Hot Rod", two homemade 1/4 wave whips (for 2 meters), and the HT rubber duck WITH AND WITHOUT a 1/4 wave (19.5 in.) piece of wire alligator-clipped to the base (i.e. shield) of the HT's bnc connector. He transmitted to another operator who recorded s meter readings for the various combinations. these went something like this, although I may not have the numbers exactly right:

	Without 1/4 wv.	radial	With radial
Rubber duck Homemd whip Hotrod	6 8 9.5-10		8.5 9.5-10 9.5-10

The author also stated that he lived in Seattle and was easily able to work a repeater 70 miles away in Vancover using either the duck-radial, or whip-radial combination. So, it's possible that your "Hot rod" is defective. I'm looking forward to trying this out with my own HTX-202. I'll post results.

'73 Mark KA3LFG

Date: 30 Mar 1994 17:59:51 GMT

From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!vixen.cso.uiuc.edu!

ux1.cso.uiuc.edu!miltf@network.ucsd.edu

Subject: AEA Hot Rot whip for HT

To: ham-ant@ucsd.edu

It sounds like a bad antenna. I use the Hot Rod when I need better coverage and it works much better than any other whip or duckie on my radio. I am really pleased with the Hot Rod. The SWR does go to a fairly low value in the 2 Meter Band - I don't remember what it was, however.

Date: Wed, 30 Mar 94 15:52:43 GMT

From: dog.ee.lbl.gov!agate!howland.reston.ans.net!torn!utnut!utcsri! newsflash.concordia.ca!canopus.cc.umanitoba.ca!tribune.usask.ca! kakwa.ucs.ualberta.ca!quartz.ucs.ualberta.ca!@@ihnp4.ucsd.edu Subject: CB Mag mount for 10M mobile?

To: ham-ant@ucsd.edu

wrt@eskimo.com (Bill Turner) writes:

>I haven't seen that particular antenna, but the component most likely to >restrict the power handling capability of a mobile antenna is the >insulation of the loading coil. At the 100 watt level several thousand >volts can be generated across the coil. This can cause arcing and also >can cause heating if the coil is wound on a lossy form.

Hardly, considering the impedance of the shortened antenna is low (4-8 ohms), the killer is the current. The voltage across the coil is in the order of about 300V (Even the standard lacquer has a 600V breakdown) feeding a 1/8 wavelength shortened antenna at 100W, the current is 12 Amperes or so, usually passing through a #26 wire ...

>Survey after survey has shown that antenna holes do not affect a car's >resale value.

It affects how fast the car can sell \dots One can always find a buyer at almost any price \dots ;-/

Ciao, 73 de VE6MGS/Mark -sk-

Date: Wed, 30 Mar 1994 22:24:24 GMT

From: amd!amdint.amd.com!dvorak.amd.com!positron!brian@decwrl.dec.com

Subject: CB Mag mount for 10M mobile?

To: ham-ant@ucsd.edu

(Chris Moore) writes:

- > It occured to me that I should be able to get
- > a CB mag mount antenna and trim it a bit to use it on 10M.

> Chris Moore

If you can find a CB antenna where you can get into the coil housing without destroying it, you'll get a wider bandwidth if you shorten the coil rather than the whip part.

For tuning the whip, substitue a length of copper wire for the whip. Tune the copper wire and then cut the whip to match. Copper cuts much easier than spring steel.

Brian McMinn N5PSS brian@amd.com

Date: 31 Mar 94 07:07:54 GMT From: agate!howland.reston.ans.net!darwin.sura.net!udel!news.sprintlink.net! connected.com!beauty!rwing!eskimo!wrt@ucbvax.berkeley.edu Subject: CB Mag mount for 10M mobile? To: ham-ant@ucsd.edu <1994Mar30.155243.20311@ve6mgs.ampr.org> Distribution: na Organization: Eskimo North (206) For-Ever In article <1994Mar30.155243.20311@ve6mgs.ampr.org>, Mark G. Salyzyn <mark@ve6mgs.ampr.org> wrote: >wrt@eskimo.com (Bill Turner) writes: >>I haven't seen that particular antenna, but the component most likely >>restrict the power handling capability of a mobile antenna is the >>insulation of the loading coil. At the 100 watt level several thousand >>volts can be generated across the coil. This can cause arcing and also >>can cause heating if the coil is wound on a lossy form. >Hardly, considering the impedance of the shortened antenna is low (4-8 >ohms), the killer is the current. The voltage across the coil is >in the order of about 300V (Even the standard lacquer has a 600V breakdown) >feeding a 1/8 wavelength shortened antenna at 100W, the current is 12 Amperes

>It affects how fast the car can sell ... One can always find a buyer at >almost any price ... ;-/
>
>Ciao, 73 de VE6MGS/Mark -sk-

>>Survey after survey has shown that antenna holes do not affect a car's

>or so, usually passing through a #26 wire ...

>>resale value.

If you're running 100 watts into a short, base or center loaded antenna and only getting 300 volts across the coil, you've got some large losses somewhere. The impedance looking into the base is low, as you say, but the impedance at the top of the coil is far higher. If there was only 300 volts, please explain how one is able to draw a most impressive arc from the top of the coil?

Date: Wed, 30 Mar 1994 23:42:42 GMT

From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!csc.ti.com!tilde.csc.ti.com!

m2.dseg.ti.com!m2.rts.dseg.ti.com!ferguson@network.ucsd.edu

Subject: Circular Polarization in Mobile Communication

To: ham-ant@ucsd.edu

I am trying to find a citation for an article that discussed using circular polarized antennas for mobile communication. I believe the article appeared in a German ham magazine in the 1980s. Does anyone remember the article (or similar articles)?

Thanks

Ed (ferguson@rts.dseg.ti.com)

Date: 30 Mar 1994 15:20:11 -0500

From: swrinde!cs.utexas.edu!howland.reston.ans.net!newsserver.jvnc.net!news.cac.psu.edu!news.pop.psu.edu!ctc.com!birdie-blue.cis.pitt.edu!dsinc!

netnews.upenn.edu!msuinfo!news.@@ihnp4.ucsd.edu

Subject: Cushcraft R7 Vertical

To: ham-ant@ucsd.edu

I am intertested in hearing from people who own or use the Cushcraft R7 Vertical antenna. I am seriously considering buying one, and I would like to know what success, if any you have had with this antenna.

It is my understanding that the R7 is designed especially for those who don't have room for a ground system, like in a condo or 2nd story apartment.

I DO have room for a ground system, so perhaps there is a different vertical that would suit me better. I am interested in 80-10.

Again, I am mainly interested in hearing from owners of verticals, not avid readers of magazines. (I have read about most of them!)

Thanks, and 73

Chris -=- N8PBI

Date: 31 Mar 94 07:20:49 GMT

From: agate!dog.ee.lbl.gov!ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!csus.edu!

netcom.com!netcomsv!skyld!jangus@ucbvax.berkeley.edu

Subject: Cushcraft R7 Vertical

To: ham-ant@ucsd.edu

In article <2ncmtr\$b1e@pace2.cts> cdsorens@mtu.edu writes:

- > I am intertested in hearing from people who own or use the Cushcraft
- > R7 Vertical antenna. I am seriously considering buying one, and I would
- > like to know what success, if any you have had with this antenna.

I have their AP-8, it is the one onebody knows about...

- > It is my understanding that the R7 is designed especially for those who don't
- > have room for a ground system, like in a condo or 2nd story apartment.

>

- > I DO have room for a ground system, so perhaps there is a different
- > vertical that would suit me better. I am interested in 80-10.

They claimed it didn't need radials either. But it assembled with the 10 meter section (the one closest to the connector) 3 feet shorter than the chart before it would load correctly on all 8 bands. Once I got that straightened out it still didn't radiate very well. The power must have been going somewhere, but it sure wasn't going towards any radios I knew about.

I bought their radial kit (APR-8 I think) and suddenly the antenna works just like you would expect from a vertical. Poorly, but still better than terrible. And yes, I had to add the 3 feet back to the bottom section.

73 es GE from Jeff

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NOAM | "You have a flair for adding Internet: jangus@skyld.grendel.com | a fanciful dimension to any

US Mail: PO Box 4425 Carson, CA 90749 | story."

Phone: 1 (310) 324-6080 | Peking Noodle Co.

Date: 31 Mar 94 02:37:09 GMT

From: dog.ee.lbl.gov!newshub.nosc.mil!news!news@ucbvax.berkeley.edu

Subject: super antenna, ?

To: ham-ant@ucsd.edu

In article <764557213.AA00583@afarm.uucp>

vqy%psuvm.psu.edu@f40.n382.z1.fidonet.org (vqy@psuvm.psu.edu) writes: > my question is, can it work as the ad says? > or if any one has an experience in using it out there, > could you share it with me? > thanks in advance. > again, please reply to rts@dinadan.psu.edu Well yes and no is my answer. It will not work to get satelites if it is the typical plug-in-the-wall TV antenna, but it will work better than rabbit ears. These antennas use the wires in your home and to the pole to gather TV signals and then pass them to the TV without passing the 60Hz AC power. They are not great antennas, but they are better than rabit ears if your TV tuner is OK. Best thing about these is their low price and easy installation. Usually these cost less than \$10, I've seen them for \$5.00 in newspaper ads. Have fun. Roger Keating - KD6EFQ keating@nosc.mil -----Date: Thu, 31 Mar 1994 00:49:52 GMT From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!gatech!wa4mei!ke4zv! gary@network.ucsd.edu To: ham-ant@ucsd.edu References <2n77mn\$npv@hpchase.rose.hp.com>, <1994Mar29.164315.21163@ke4zv.atl.ga.us>, <p68uhdI.cecilmoore@delphi.com>, Reply-To : gary@ke4zv.atl.ga.us (Gary Coffman) Subject : Re: CB Mag mount for 10M mobile? In article <p68uhdI.cecilmoore@delphi.com> Cecil Moore <cecilmoore@delphi.com> writes: >Gary Coffman <gary@ke4zv.atl.ga.us> writes: >>The best way to operate 10 meters with a converted CB antenna is to >>start with a bumper mount 102 inch whip and shorten it about 10 inches. >Hi Gary, that would result in 92 inches. For the novice portion (28.4 MHz) >I think it needs to be a little longer than 92 inche s for resonance.

What? There's activity other tha	n FM on 10 meters?	P I'm shocked! :-)
Gary		
Gary Coffman KE4ZV Destructive Testing Systems 534 Shannon Way Lawrenceville, GA 30244	You make it, we break it. Guaranteed!	gatech!wa4mei!ke4zv!gary uunet!rsiatl!ke4zv!gary emory!kd4nc!ke4zv!gary
End of Ham-Ant Digest V94 #87		